Etidronate level calculation from Sobakbar et al.:

From Method's section we read that they mixed 5 mg and 20 mg etidronate per gram of monomer. For a typical 40 gram bag of PMMA powder, i.e., standard clinical dose, 20 ml of monomer is required for polymerization. Since the density of monomer is 0.936grm/ml, the weight of monomer is:

20ml x 0.936grm/ml = 18.72 grams monomer per 40 grams PMMA powder then:

5mg etidronate/grm monomer x 18.72 grams monomer = 93.6 mg or **0.094 grm etidronate per 40 grams PMMA powder**

and

20 mg etidronate/grm monomer x 18.72 grams monomer = 374.4 mg or **0.374 grm etidronate per 40 grams PMMA powder**.